



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Chang-Lin Hsieh et al.  
 Application No.: 10/016,562  
 Date Filed: 12/12/01  
 Title: PROCESS FOR SELECTIVELY ETCHING DIELECTRIC LAYERS

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop DD  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office.

I. COPIES

- a. ☒ A legible copy of (i) each U.S. and foreign patents; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. ☐ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. ☐ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. ☐ The following additional information is provided for the Examiner's consideration:

III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

FEES

IV. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)

- a. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.



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U.S. Serial NumberU.S. Filing DateII. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

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Serial No.Filing DateArt UnitFEESIV ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)

- a. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.

- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or statement is required.
- c. ☐ before the mailing date of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or statement is required.
- d. ☐ before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

V. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c): (check one box)  
before the mailing date of any of a Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. § 1.97(c)).

- a. ☐ No statement; therefore, charge deposit account 50-1047 the fee set forth in 37 C.F.R. § 1.17(p).
- b. ☒ See the statement below. No fee is required.

VI. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(d):

on or before payment of the issue fee and is accompanied by the following:

- 1) a statement under 37 C.F.R. § 1.97(e) as provided below; and
- 2) charge deposit account 50-1047 the petition fee set forth in § 1.17(p).

VII. ☒ STATEMENT UNDER 37 C.F.R. § 1.97(e) (check only one box, if applicable)

The undersigned hereby states that

- a. ☒ Each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
- b. ☐ No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
- c. ☐ Some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

VIII. PAYMENT OF FEES

- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the above-identified fee(s).
- ☐ Please charge Deposit Account No. 50-1047 in the amount of \$180.00 for the above-indicated fee(s).
- ☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 50-1047.
- ☐ Two Copies of this paper are attached for Deposit Account charges and debits.

It is Applicant(s)' opinion that the claims presently on file patently distinguish the present invention from each of these references. The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-1047.

Respectfully submitted,



David B. Bonham  
Attorney for Applicant(s)  
Reg. No. 34,297  
Tel. 703-433-0510  
Fax: 703-433-2362

MAYER FORTKORT & WILLIAMS  
Customer Number 27774

Enclosures: ☒ PTO/SB/08  
☒ References  
☐ Foreign Search Report  
☐ Other:

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P.O. Box 1450, Alexandria, VA 22313-1450.

Marjorie Scariati

Signature of Person Mailing Correspondence

Marjorie Scariati

Typed or Printed Name of Person Mailing Certificate

Complete if Known

## Application Number

10'016,562

Filing Date

12:12:01

**First Named Inventor**

Chang-Lin Hsieh et al

Group Art Unit

: 765

Examiner Name \_\_\_\_\_

Unassigned **DLC**

Attorney Docket Number

004544 ALRTETCH:DIOP

2. Use as many sheets as necessary;

Sheet	1	of	1
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Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Class/Subclass (if known)			
	1.	JP	2001210627	H01L 21/3065	Matsushita Electric Ind. Co. Ltd.	08/03/2001	
JS	2.	EP	1 085 563 A2	H01L 21/311	Motorola, Inc.	09/11/2000	
JS	3.	EP	1 059 664 A2	H01L 21/312	Applied Materials, Inc.	06/08/2000	
JS	4.	EP	0 805 485 A2	H01L 21/311	Applied Materials, Inc.	04/17/1997	
JS	5.	WO	02/19408 A2	H01L 21/311	Applied Materials, Inc.	03/07/2002	

Examiner Signature	<i>La</i>	Date Considered	9/22/03
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EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 809 Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number	10/016,562
Filing Date	12/12/01
First Named Inventor	Chang-Lin Hsieh et al
Group Art Unit	:765
Examiner Name	L.assigned <i>Dilo</i>
Attorney Docket Number	004544 ALR/TETCH/DICP

use as many sheets as necessary;

8. Shoe	1	of	1
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[illegible]

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Class/Subclass (if known)			
	1.	JP	2001210627	H01L 21/3065	Matsushita Electric Ind. Co. Ltd.	08/03/2001	
RL	2.	EP	1 085 563 A2	H01L 21/311	Motorola, Inc.	09/11/2000	
RL	3.	EP	1 059 664 A2	H01L 21/312	Applied Materials, Inc.	06/08/2000	
RL	4.	EP	0 805 485 A2	H01L 21/311	Applied Materials, Inc.	04/17/1997	
RL	5.	WO	02/19408 A2	H01L 21/311	Applied Materials, Inc.	03/07/2002	

Examiner Signature	<i>Ed</i>	Date Considered	9/22/03
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# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

004544 ALRT/ETCH/DICP

Application Number

Unassigned

15/016562

Applicant(s)

Chang-Lin Hsieh et al.

Filing Date

Filed Herewith

Group Art Unit

Unassigned 1765

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
ll	1	5,445,710	8/29/95	Hori et al.	438	717	
	2	5,935,874	8/10/99	Kennard	438	710	
	3	6,054,379	4/25/00	Yau et al.	438	623	
	4	6,071,809	6/6/00	Zhao	438	634	
	5	6,072,227	6/6/00	Yau et al.	257	642	
	6	6,097,095	8/1/00	Chung	257	774	
	7	6,165,891	12/26/00	Chooi et al.	438	622	
	8	6,168,726	1/2/01	Li et al.	216	79	
	9	6,180,533	1/30/01	Jain et al.	438	714	
	10	6,207,583	3/27/01	Dunne et al.	438	725	
ll	11	6,211,092	4/3/01	Tang et al.	438	719	

15720 U.S. PTO  
10/016562  
12/12/01

## FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER

ll

DATE CONSIDERED

9/22/03

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# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)  
004544 ALRT/ETCH/DICP

Application Number 10/016582  
Unassigned

Applicant(s)  
Chang-Lin Hsieh et al.

Filing Date  
Filed Herewith

Group Art Unit  
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10/016582  
12/12/01

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REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


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